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an imager to capture images;
an image processor with program memory for processing the captured image to produce an initially-processed image;
additional program memory [for] adapted to further [processing] process the initially-processed image to effect compensation for [changes in] printer characteristics [which vary during the printing process]; and
a printer interface for receiving process color and printing process parameters from the printer and for transmitting processed images to the printer, wherein the camera receives color and printing process parameters from the printer, stores the parameters in the additional program memory, applies the parameters by further processing the initially-processed image to compensate for printer characteristics, and transmits the printer compensated image to the printer.

5. (Amended) A system comprising:

a printer having predetermined process colors and printing process characteristics represented by parameters stored therein and a digital interface adapted to communicate the parameters, and

a digital camera including an imager to capture images, an image processor with program memory for processing the captured image to produce an initially-processed image, an interface adapted to communicate with the printer to receive the parameters from the printer, and additional program memory [for] adapted to further [processing] process the initially-processed image using the parameters provided by the printer to effect compensation for [changes in] printer characteristics [which vary during the printing process].

8. (Amended) A system comprising:

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a printer having predetermined process color and printing process parameters, a camera interface, [an inexpensive simple] a processor, a program memory for storing the parameters, and a marking apparatus under the control of the processor [program memory]; and

a camera having an imager to capture images, an image processor with program memory for storing the parameters from the printer and for processing the captured image using the color and printing process parameters [to produce an initially-processed image, additional program memory for further processing the

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initially-processed image] to effect compensation for [changes in] printer characteristics [which vary during the printing process], and a printer interface for receiving process color and printing process parameters from the printer and for transmitting processed images to the printer.

Add the following claims:

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Sub D5

--11. A process for digital cameras used with a printer having predetermined process colors and printing process characteristics, said process including the steps of:

capturing an image on an imager;
processing the captured image to produce an initially-processed image;
and

further processing the initially-processed image to effect compensation for changes in printer characteristics which vary during the printing process.

12. A process as set forth in Claim 11 further comprising storing printer process parameters in a parameter memory.

Sub D6

13. A process as set forth in Claim 11 further comprising effecting one or more of the following: image sensor tone scale compensation, color filter array interpolation, color space transformation, re-sizing, spatial filtering, and data compression.

14. A process for digital cameras used with a printer, said process including the steps of:

capturing an image on an imager;
receiving from the printer parameters which vary as a result of manufacturing variations in the printer;
processing the captured image to effect compensation for manufacturing variations in the printer; and

providing the processed image to the printer for printing.

15. The process of claim 14 further comprising storing the printer parameters in a parameter memory.

16. The process of claim 14 wherein the printer parameters further vary with media type.

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Sub D7

~~17. The process of claim 14 wherein the printer parameters define one or more of colorimetry, sensitometry, and artifacts compensation.~~

~~18. A process for printers used with a digital camera providing processing that corrects for manufacturing variations of the printer, said process including the steps of:~~

~~measuring parameters which may vary as a result of manufacturing variations;~~

~~storing the parameters in a parameter memory within the printer;~~

~~providing the stored parameters to the digital camera;~~

~~receiving a corrected digital image from the camera; and~~

~~printing the corrected digital image.~~

~~19. The process of claim 18 wherein the printer parameters further vary with media type.~~

~~20. The process of claim 19 wherein the printer parameters define one or more of colorimetry, sensitometry, and artifacts compensation.--~~

REMARKS

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al (US 5,040,068) in view of Kumasaka et al. (US 4,952,951). Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski (5,040,068) in view of Ichikawa (US 5,717,839) and Kumasaka et al. (US 4,952,951).

The present claims call for a camera and method of processing an initially-processed image to effect compensation for changes in printer characteristics which are provided by parameters stored in the printer and communicated to the camera. Such parameters may vary as a result of manufacturing variations (see page 4, lines 3-13)

Not one of the references of record discloses a camera that provides for processing the image to effect compensation for printer parameters which are stored in the printer and communicated to the camera, nor which effect compensation for process parameters which change during the printing process. Parulski et al. does not describe or suggest uploading, to the camera, data which has been stored in the printer during the manufacturing process. To the contrary,